

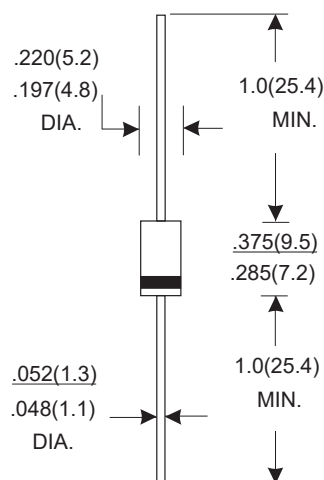
DO-27 Ultra-Fast Recovery Rectifier Diodes

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- Low Power Loss, High Efficiency
- Ultrafast 35second Recovery times

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	MUR410	MUR420	MUR430	MUR440	MUR450	MUR460	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	70	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	100	200	300	400	500	600	V
Maximum Average Forward Rectified Current. Lead Length at $T_A=75^{\circ}\text{C}$	$I_{F(AV)}$	4.0						A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120.0						A
Maximum Instantaneous Forward Voltage at 4.0A	V_F	1.0		1.3		1.7		V
Maximum reverse current at rated DC blocking voltage	@ $T_A=25^{\circ}\text{C}$	10.0						μA
	@ $T_A=125^{\circ}\text{C}$							
Maximum reverse recovery time (Note1)	t_{rr}	50						ns
Typical junction capacitance (Note2)	C_J	90						pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	20						$^{\circ}\text{C}/\text{W}$
Operating junction temperature range	T_j	-50 ---- + 125						$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-50 ---- + 150						$^{\circ}\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Leads maintained at ambient temperature at a distance of 9.5mm from the case

3. Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

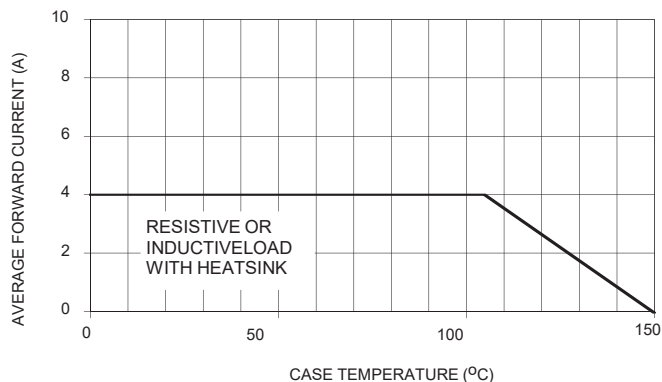


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

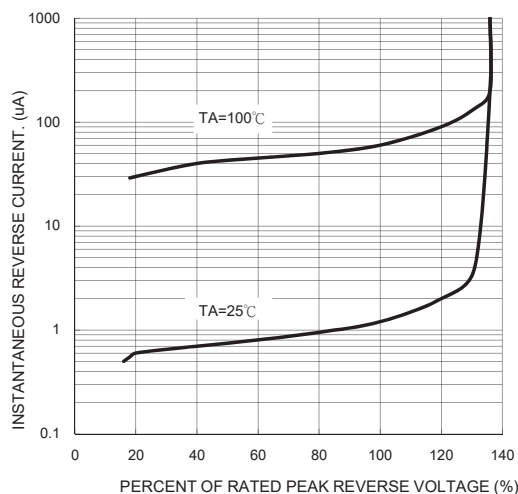


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

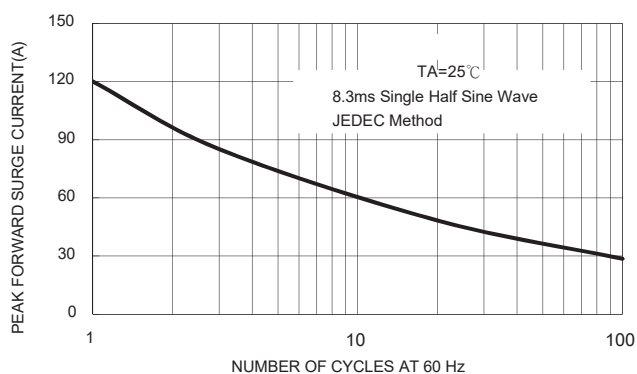


FIG. 4- TYPICAL JUNCTION CAPACITANCE

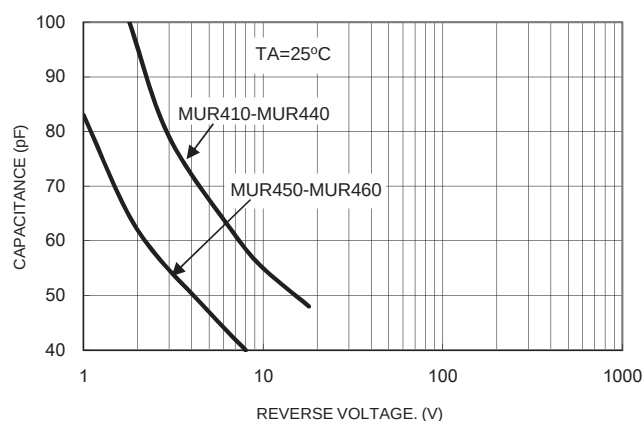


FIG. 5-TYPICAL FORWARD CHARACTERISTICS

